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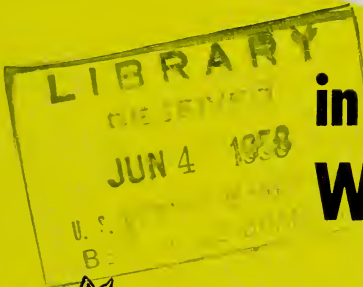
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#319

REDUCING LIVESTOCK LOSSES

from

Death Camas
POISONING



in the
Western States



PA-319

UNITED STATES DEPARTMENT OF AGRICULTURE

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Death Camas POISONING

in the Western States

Death camas is the common name of several species of plants that are poisonous to livestock. The more toxic of these species are grassy death camas,¹ meadow death camas,² foothill death camas,³ and Nuttall's death camas.⁴ They are found principally in the western range States.

Sheep are most likely to be affected by feeding on death camas, but occasionally cattle and horses

are affected. Most losses occur in the spring, when green forage is scarce and animals are forced to eat these toxic plants.

Death camas contains one or more toxic alkaloids, which are distributed throughout the plant. Animals are poisoned by eating toxic amounts of the leaves, stems, and flowers.

The plants are dangerous at all times.

Where and When It Grows

Some species thrive on sandy plains, and others in the drier, rocky foothill areas. The more toxic species are seldom found above elevations of 8,000 feet.

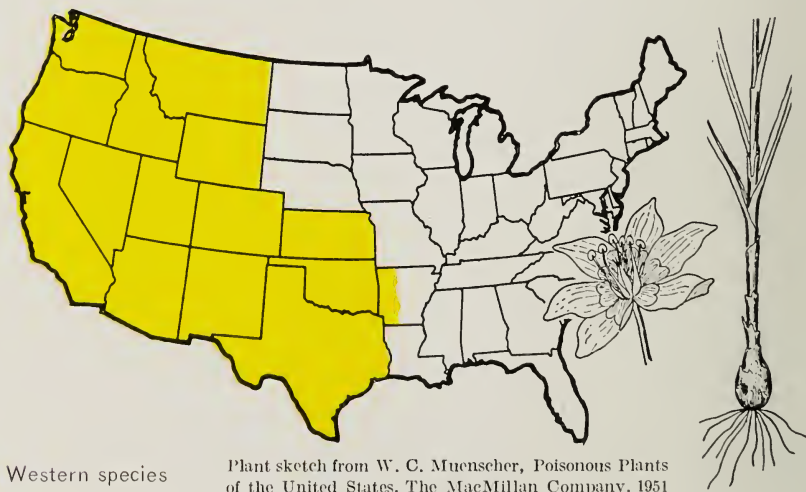
The leaves appear early in the spring, and are soon followed by the flower stalk. At higher elevations, the plants generally flower in late June and July.

¹ *Zigadenus gramineus*.

² *Z. venenosus*.

³ *Z. paniculatus*.

⁴ *Z. nuttallii*.



Western species

Plant sketch from W. C. Muenscher, *Poisonous Plants of the United States*, The MacMillan Company, 1951



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Death camas has grasslike leaves that grow from a deeply buried bulb, which is odorless. Its flowers are yellowish white and grow in clusters at the top of a stalk, which may be 4 to 18 inches tall. The plant is a perennial and belongs to the lily family.

How It Affects Livestock

Death camas may affect an animal's nervous system, respiration, and heart. A 100-pound sheep may die if it eats $\frac{1}{2}$ to 2 pounds of green foliage. The amount of foliage

that will cause an animal's death depends on the species of plant eaten. Severely poisoned animals usually die; those less seriously affected may recover.

Symptoms of death camas poisoning

1. Rapid breathing
2. Excessive salivation
3. Nausea
4. Weakness and staggering
5. Convulsions
6. Coma

How To Reduce Livestock Losses

Livestock owners can reduce losses by following good management practices: (1) Keep animals off death camas ranges until adequate forage is available. (2) Give animals supplemental feed. (3)

Seed range to nutritious and palatable vegetation if this is practicable.

There is no effective treatment for death camas poisoning, and eradication of the plants is not practicable.

Where To Obtain More Information

You can obtain more detailed information on death camas poisoning by getting in touch with your county agricultural agent or by writing to your State agricultural experiment station or to the U. S. Department of Agriculture. Con-

sult your local veterinarian if you have any questions regarding affected animals. *Note:* The map on page 2 shows areas where most livestock poisoning has been reported. It is possible that death camas grows in other areas.

Know Poisonous Plants • Reduce Livestock Losses

Prepared by the Animal Disease and Parasite Research Division, Agricultural Research Service. Acknowledgment is made to the staff of the Utah Agricultural Experiment Station.

Washington, D. C.

☆ 421074 U. S. GOVERNMENT PRINTING OFFICE : 1958

Issued April 1958